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HR-1 Helicopter Rappel Harness

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HR-1 helicopter rappel harness.

With continued interest in helicopter rappelling as a means of transporting firefighters for initial attack, Missoula Technology and Development Center (MTDC) has developed the HR-1 helicopter rappel harness. The harness comes in two sizes, medium and large, and has been designed with particular attention to standardization, safety, and durability.

The HR-1 harness is the culmination of a development process which elicited a high degree of interagency cooperation; input was received from the Bureau of Land Management, in particular Jeff Bass (National Aviation and Retardant Specialist, BLM NIFC), as well as Forest Service personnel. The focus was to develop a standardized, adjustable harness for use by agencies involved with wildland fire suppression. Specifically designed for helicopter rappel, the HR-1 is *not* intended as a short-haul or climbing harness.

All webbing used in the construction of the harness conforms to military specifications. Static strength testing was performed on the prototype harness. Quality assurance procedures have been defined, further ensuring that each harness meets or exceeds the highest standards of construction. The HR-1 harness can be manufactured either by private industry or at a certified smokejumper loft, with quality assurance first article inspections conducted by MTDC.



The HR-1 helicopter rappel harness provides a stable, "head-up," feet-to-ground position.

Sizing is determined by hip measurement, with the medium harness fitting up to 41 inches and the large up to 44 inches. With adjustable shoulder straps, the firefighters are assured of the proper descent attitude, regardless of body shape or size. The descent device is properly placed directly in front of the rappeller, giving the rappeller full control at all times. Pads on the leg straps add greater comfort, and the shoulder strap slider can be tacked in place for a personalized fit.

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